

Exhibit B-6: Eighth-Grade Mathematics Performance, by Subtopic

Average Percent Correct

Whole Numbers	Common Fractions	Decimal Fractions & Percentages	Relationships of Fractions	Estimations of Quantity & Size	Rounding	Estimating Computations	Measurement Units	Perimeter, Area, Volume	Measurement Estimations & Errors
Higher than FiW	Higher than FiW	Same as FiW	Same as FiW	Same as FiW	Same as FiW	Same as FiW	Higher than FiW	Higher than FiW	Higher than FiW
Singapore 80.4	Singapore 82.4	Singapore 77.9	Singapore 85.1	Japan 77.9	First in the World 89.1	Singapore 75.8	Singapore 77.9	Singapore 84.5	Czech Republic 82.9
		First in the World 73.8	First in the World 78.3	Singapore 77.3	Czech Republic 86.9	First in the World 74.5	Japan 72.6	Japan 72.6	Singapore 81.0
Same as FiW	Same as FiW	Czech Republic 72.5	Korea 77.6	First in the World 76.2	Singapore 86.6	Czech Republic 69.8	Same as FiW		Sweden 80.8
Japan 72.0	Japan 72.2	Hong Kong 71.1	Japan 75.3	England 72.2	Canada 84.7	Japan 69.0	Japan 74.8		
Switzerland 70.2	Korea 69.9	Japan 69.8	Hong Kong 74.1	Hong Kong 71.8	Korea 83.8	Korea 66.7	Czech Republic 73.2	Same as FiW	
Belgium (FI) 68.6	Hong Kong 69.4	Hungary 68.7	Belgium (FI) 71.3	Switzerland 71.8			Belgium (FI) 71.8	Hong Kong 63.9	Korea 79.5
Korea 67.6	Belgium (FI) 68.7	Korea 68.4		Czech Republic 71.7	Lower than FiW	Lower than FiW	Switzerland 71.6	Korea 61.8	Korea 79.5
Czech Republic 67.4	First in the World 65.8	Lower than FiW	Lower than FiW	Netherlands 71.2	Belgium (FI) 81.0	Belgium (FI) 64.1	Sweden 69.5	First in the World 49.9	Belgium (FI) 78.9
First in the World 67.0	Switzerland 62.4		Switzerland 70.0	Belgium (FI) 70.7	Hungary 79.8	Switzerland 62.5	France 69.0	Czech Republic 48.9	Hungary 78.2
Hong Kong 65.4	Czech Republic 59.6	Russian Federation 65.9	France 67.2	Korea 70.7	Japan 79.6	Canada 61.3	Korea 67.9	Belgium (FI) 45.6	Netherlands 76.1
France 64.5	Netherlands 58.9	France 64.9	Canada 65.1	Australia 69.3	United States 79.2	Sweden 60.0	Hungary 67.5	France 44.1	France 75.2
Russian Federation 62.7	France 57.8	Belgium (FI) 64.6	Czech Republic 64.9	Hungary 69.3	Netherlands 78.5	Australia 59.1	Netherlands 66.8	Hungary 42.9	First in the World 75.0
Spain 60.8	Hungary 57.7	Switzerland 61.9	Germany 62.6	Sweden 69.3	Sweden 78.5	Netherlands 58.7	First in the World 66.4	Russian Federation 44.6	Australia 74.5
Hungary 60.6	Israel 57.4	Canada 61.0	Sweden 62.2	France 69.0	Australia 77.5	Hong Kong 57.8	Norway 66.4	Netherlands 44.0	Norway 74.5
Sweden 58.9		Sweden 59.2	Australia 61.0	Germany 69.0	Switzerland 77.4	New Zealand 57.6	Russian Federation 65.9	Australia 42.1	Germany 72.9
Israel 59.0	Lower than FiW	Thailand 58.0	Hungary 60.7		Thailand 75.4	Hungary 57.3	Australia 65.0	Canada 40.4	Hong Kong 72.7
Canada 57.9	Canada 56.2	Netherlands 57.8	Norway 59.6	Lower than FiW	France 74.7	Norway 57.0	Hong Kong 65.2	Thailand 40.0	Japan 72.5
	Australia 55.4	Germany 57.2	Netherlands 62.5	Canada 67.8	New Zealand 74.4	United States 55.7	Germany 63.5	Sweden 39.3	England 71.8
Lower than FiW	Russian Federation 55.8	Israel 56.3	Thailand 59.6	Norway 66.6	Hong Kong 74.2	England 54.4	Canada 63.0	INTERNATIONAL 39.0	New Zealand 70.6
Thailand 56.0	Thailand 54.2	United States 55.8	Russian Federation 59.2	New Zealand 65.3	England 74.2	Germany 52.0	Israel 63.0	England 37.1	Canada 69.7
INTERNATIONAL 55.5	Sweden 53.1	INTERNATIONAL 55.4	United States 58.5	Russian Federation 63.5	Russian Federation 73.5	Israel 51.9	Spain 62.4	Israel 36.9	Russian Federation 69.6
Germany 55.4	INTERNATIONAL 52.1	Norway 54.1	Israel 57.6	United States 62.7	Norway 72.3	France 50.8	Thailand 62.3		
Australia 55.0	Germany 51.7	Australia 53.5	INTERNATIONAL 56.9	INTERNATIONAL 61.0	INTERNATIONAL 70.7	INTERNATIONAL 50.6	INTERNATIONAL 61.4	Lower than FiW	Lower than FiW
Netherlands 53.5	New Zealand 51.5	Spain 50.6	New Zealand 56.8	Israel 58.4	Germany 69.9	Russian Federation 50.0	New Zealand 61.3	Norway 36.4	Thailand 66.1
Norway 53.4	Norway 51.2	New Zealand 49.3	England 53.8	Thailand 57.1	Israel 68.8	Thailand 49.5	England 60.5	New Zealand 35.0	INTERNATIONAL 64.7
United States 52.3	United States 49.3	England 45.9	Spain 48.2	Spain 54.8	Spain 62.2	Spain 44.1		Germany 32.9	Israel 63.3
New Zealand 48.6	England 49.2						Lower than FiW	Spain 29.9	United States 62.5
England 46.8	Spain 49.2						United States 53.0	United States 27.8	Spain 55.3

2D Geometry Basics	Polygons & Circles	3D Geometry & Transformations	Congruence & Similarity	Proportionality Concepts	Proportionality Problems	Patterns, Relations, & Functions	Equations & Formulas	Data Represent. & Analysis	Statistics & Probability
Higher than FiW	Higher than FiW	Same as FiW	Higher than FiW	Higher than FiW	Higher than FiW	Same as FiW	Higher than FiW	Same as FiW	Same as FiW
Japan 78.9	Korea 73.0	Japan 84.3	Japan 79.7	Singapore 70.1	Singapore 76.7	Japan 70.0	Singapore 79.8	Japan 84.3	First in the World 81
	Japan 70.8	Singapore 78.6	Korea 76.9			Korea 68.4		First in the World 83.2	Singapore 78.5
Same as FiW	Singapore 70.6	First in the World 78.0	Singapore 76.7	Same as FiW	Same as FiW	Singapore 67.2	Same as FiW	Korea 81.9	Korea 77.8
Singapore 78.3		Czech Republic 77.7		Korea 57.0	Japan 67.8	First in the World 63.2	Japan 72.3	France 81.4	Belgium (FI) 77.7
Korea 75.5	Same as FiW	France 77.7	Same as FiW	Japan 56.9	Korea 65.1	Hong Kong 60.8	Hong Kong 70.5	Switzerland 81.3	Japan 75.0
Hong Kong 73.5	Hong Kong 65.4	Hong Kong 77.6	Hong Kong 71.0	First in the World 50.6	Hong Kong 64.0	Czech Republic 60.2	Korea 70.0	Singapore 81.0	Hong Kong 73.0
First in the World 65.0	Belgium (FI) 64.1	Switzerland 75.9	France 69.7	Hong Kong 50.1	Czech Republic 61.3	England 60.1	First in the World 67.8	Netherlands 80.6	Netherlands 72.4
Russian Federation 63.4	France 61.9	Belgium (FI) 73.7	Czech Republic 66.1	Netherlands 41.9	First in the World 61.1	Switzerland 59.5	Czech Republic 64.3	Czech Republic 79.6	
Netherlands 62.9	Israel 59.7	Korea 73.3	Thailand 62.7		Belgium (FI) 59.4	Belgium (FI) 59.2	Belgium (FI) 62.1	Sweden 79.5	Lower than FiW
Thailand 62.4	Czech Republic 57.4	Hungary 71.0	Russian Federation 62.3	Lower than FiW	Switzerland 57.3	Hungary 59.1	Russian Federation 61.4	Belgium (FI) 79.5	Switzerland 72.4
Czech Republic 62.1	Russian Federation 57.2	Netherlands 70.6	First in the World 62.2	Canada 40.3	Russian Federation 56.3	Canada 58.2	Hungary 60.9	Hong Kong 76.4	Canada 70.0
Hungary 61.6	First in the World 56.1	Russian Federation 70.2	Belgium (FI) 57.5	Sweden 39.2	Thailand 56.0	Australia 57.6	Israel 58.3	Germany 76.0	Sweden 68.7
Australia 58.8	Thailand 53.5	Canada 70.1	Israel 54.8	Belgium (FI) 39.0	Hungary 55.9	Netherlands 56.9		Australia 67.5	Australia 67.5
Switzerland 57.9	Hungary 51.6		Hungary 53.4	Australia 37.8	Netherlands 55.9	New Zealand 55.7	Lower than FiW	Lower than FiW	France 66.5
Belgium (FI) 58.8	Canada 50.5	Lower than FiW	Canada 52.8	France 37.3	France 55.7	France 55.0	Thailand 54.0	Norway 75.5	Hungary 66.2
France 56.1	Australia 50.4	New Zealand 67.3	Netherlands 51.0	Switzerland 36.8			France 53.6	Australia 75.2	New Zealand 65.9
New Zealand 55.8	INTERNATIONAL 48.9	England 66.3		Czech Republic 37.3	Lower than FiW	Lower than FiW	Australia 52.8	Canada 75.0	England 65.3
England 54.9	Switzerland 48.6	Australia 65.5	Lower than FiW	Thailand 36.5	Australia 52.2	Thailand 53.4	Canada 52.4	England 74.8	Norway 64.7
Canada 54.7	England 47.0	Israel 64.8	INTERNATIONAL 52.6	England 34.8	Canada 51.6	Russian Federation 53.2	Spain 52.2	Thailand 74.5	Czech Republic 63.4
INTERNATIONAL 53.8	Netherlands 44.0	Thailand 64.5	Switzerland 51.2	Hungary 34.6	INTERNATIONAL 50.1	Israel 53.2	Switzerland 51.9	New Zealand 74.1	United States 63.1
Israel 52.5		Germany 63.7	Australia 50.9	Russian Federation 33.5	Sweden 49.2	INTERNATIONAL 51.4	Netherlands 51.7	Hungary 73.7	Germany 62.4
Norway 52.1	Lower than FiW	Norway 63.6	Norway 46.9	INTERNATIONAL 33.4	Germany 49.0	United States 51.1	INTERNATIONAL 50.6	Israel 73.2	Israel 62.3
Germany 49.3	Germany 44.3	Norway 58.6	New Zealand 45.9	New Zealand 33.4	England 47.2	Spain 50.3	United States 49.4	United States 72.6	INTERNATIONAL 59.6
	New Zealand 43.2	United States 58.4	Sweden 45.9	United States 31.5	New Zealand 47.1	Norway 48.7	Germany 46.4	Russian Federation 72.0	Spain 58.0
Lower than FiW	Sweden 42.8	Spain 58.2	England 45.6	Israel 31.4	Israel 46.5	Germany 47.6	New Zealand 46.6	INTERNATIONAL 70.9	Russian Federation 56.9
Spain 49.5	Norway 42.4	Sweden 55.9	Germany 45.1	Norway 30.9	Norway 47.1	Sweden 47.2	Norway 44.9	Spain 70.4	Thailand 56.5
United States 47.9	Spain 39.3		United States 44.1	Spain 27.4	United States 45.2		England 44.1		
Sweden 46.1	United States 39.1		Spain 43.6	Germany 26.5	Spain 43.6		Sweden 43.7		